

## EAST Search History

| Ref # | Hits  | Search Query   | DBs                          | Default Operator | Plurals | Time Stamp       |
|-------|-------|--|------------------------------|------------------|---------|------------------|
| S1    | 1     | ("6621808").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2006/03/20 15:42 |
| S2    | 1     | ("6662024").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2006/03/20 15:43 |
| S3    | 1     | ("6751187").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2006/03/20 15:43 |
| S4    | 263   | (pilot adj tone) and ofdm                                      | US-PGPUB;<br>USPAT           | OR               | OFF     | 2006/03/23 12:12 |
| S5    | 194   | S4 and (null or zero)  | US-PGPUB;<br>USPAT           | OR               | OFF     | 2006/03/23 12:12 |
| S6    | 136   | (pilot adj tone) and null                                      | US-PGPUB;<br>USPAT           | OR               | OFF     | 2006/03/23 12:11 |
| S7    | 292   | S6 S5  | US-PGPUB;<br>USPAT           | OR               | OFF     | 2006/03/23 12:11 |
| S8    | 243   | (pilot adj tone) and null                                      | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:11 |
| S9    | 428   | (pilot adj tone) and ofdm                                      | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:12 |
| S10   | 308   | S9 and (null or zero)  | US-PGPUB;<br>USPAT           | OR               | OFF     | 2006/03/23 12:12 |
| S11   | 330   | S9 and (null or zero)  | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:12 |
| S12   | 476   | S11 S8   | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:12 |
| S13   | 148   | S12 and (symbol adj time)                                      | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:13 |
| S14   | 85    | S13 and (transmi\$5 adj power)                                 | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:40 |
| S15   | 1     | S14 and flarion.as.  | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:16 |
| S16   | 84    | S15 xor S14  | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:17 |
| S17   | 14    | S16 and (null with (tone or pilot or signal or transmission))  | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:24 |
| S18   | 9     | S16 and (multi\$3 adj (cell or sector or site or block))       | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/03/23 12:39 |
| S19   | 24905 | (first with (pilot or tone)) and (second with (pilot or tone)) | US-PGPUB;<br>USPAT           | OR               | ON      | 2006/04/12 10:14 |

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|     |      |  |                        |    |     |                  |
|-----|------|--|------------------------|----|-----|------------------|
| S20 | 7344 | (first with (pilot or tone)) and (second with (pilot or tone)) and (third with (pilot or tone))  | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 12:40 |
| S21 | 1340 | S20 and (transmi\$5 with power)  | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 12:40 |
| S22 | 699  | S21 and (null or ((zero or no or off) with (power or amplitude)))  | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 12:42 |
| S23 | 75   | S22 and (ofdm or (orthogonal with frequency with divi\$4 with multipl\$2))   | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 12:52 |
| S24 | 4    | noise adj characteristic adj line  | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 12:52 |
| S25 | 143  | (adjacent adj sector) and (pilot with (signal or tone))  | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 14:35 |
| S26 | 38   | (adjacent adj sector) same (pilot with (signal or tone))   | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 14:33 |
| S27 | 48   | S25 and (symbol with time)   | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 14:36 |
| S28 | 19   | S26 and S27  | US-PGPUB; USPAT        | OR | ON  | 2006/03/23 14:36 |
| S29 | 12   | (US-20040233838-\$ or US-20040095907-\$ or US-20040151109-\$ or US-20010015673-\$ or US-20030086366-\$ or US-20020122465-\$ or US-20020090042-\$).did. or (US-6108349-\$ or US-6035000-\$ or US-6751187-\$ or US-6621808-\$ or US-6662024-\$).did. | US-PGPUB; USPAT        | OR | OFF | 2006/04/11 15:35 |
| S30 | 1    | S29 and ((variable or adaptive) with tones)  | US-PGPUB; USPAT        | OR | OFF | 2006/04/11 15:40 |
| S31 | 139  | ofdm and tones and symbols and null  | US-PGPUB; USPAT        | OR | OFF | 2006/04/11 15:41 |
| S32 | 33   | S31 and first and second and third and fourth and fifth  | US-PGPUB; USPAT        | OR | OFF | 2006/04/12 10:14 |
| S33 | 25   | S32 and (("same" or different or equal or lower or higher) with tones)   | US-PGPUB; USPAT        | OR | OFF | 2006/04/12 10:13 |
| S34 | 19   | S33 and (("same" or different or equal or lower or higher or more or less) with power)   | US-PGPUB; USPAT        | OR | OFF | 2006/04/11 16:26 |
| S35 | 290  | (455/13.4).CCLS.   | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/04/11 16:27 |

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|     |      |   |                              |    |     |                  |
|-----|------|---|------------------------------|----|-----|------------------|
| S36 | 294  | (455/68).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/04/11 16:27 |
| S37 | 365  | (370/318).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/04/11 16:27 |
| S38 | 151  | (370/319).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/04/11 16:27 |
| S39 | 2532 | ofdm and (("same" or different or equal or lower or higher) with power) | US-PGPUB;<br>USPAT           | OR | OFF | 2006/04/12 10:13 |
| S40 | 211  | S39 and (("same" or different or equal or lower or higher) with tones)  | US-PGPUB;<br>USPAT           | OR | OFF | 2006/04/12 10:13 |
| S41 | 101  | (first with (pilot or tone)) and (second with (pilot or tone)) and S40  | US-PGPUB;<br>USPAT           | OR | ON  | 2006/04/12 10:15 |
| S42 | 49   | S41 and (null or (zero with power))                                     | US-PGPUB;<br>USPAT           | OR | ON  | 2006/04/12 10:16 |
| S43 | 56   | S41 and (null or ((zero or "0") with power))                            | US-PGPUB;<br>USPAT           | OR | ON  | 2006/04/12 11:26 |
| S44 | 29   | S43 and (sector or multi\$sector)                                       | US-PGPUB;<br>USPAT           | OR | ON  | 2006/04/12 10:18 |
| S45 | 2151 | (455/522).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/04/12 10:38 |
| S46 | 70   | S45 and S39   | US-PGPUB;<br>USPAT           | OR | OFF | 2006/04/12 10:38 |
| S47 | 41   | S46 and (null or ((zero or "0") with power))                            | US-PGPUB;<br>USPAT           | OR | ON  | 2006/04/12 11:26 |
| S48 | 2532 | ofdm and (("same" or different or equal or lower or higher) with power) | US-PGPUB;<br>USPAT           | OR | OFF | 2006/04/12 13:56 |
| S49 | 2151 | (455/522).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/04/12 13:56 |
| S50 | 70   | S49 and S48   | US-PGPUB;<br>USPAT           | OR | OFF | 2006/04/12 13:56 |
| S51 | 41   | S50 and (null or ((zero or "0") with power))                            | US-PGPUB;<br>USPAT           | OR | ON  | 2006/04/12 14:21 |
| S52 | 211  | S48 and (("same" or different or equal or lower or higher) with tones)  | US-PGPUB;<br>USPAT           | OR | OFF | 2006/04/12 13:56 |

## EAST Search History

|     |      |  |                 |    |     |                  |
|-----|------|--|-----------------|----|-----|------------------|
| S53 | 101  | (first with (pilot or tone)) and (second with (pilot or tone)) and S52                                   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 13:56 |
| S54 | 56   | S53 and (null or ((zero or "0") with power))   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 13:56 |
| S55 | 29   | S54 and (sector or multi\$sector)  | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:30 |
| S56 | 55   | (S51 S55) and (pattern or sequence)  | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:01 |
| S57 | 11   | ninth with pilot with tone   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:04 |
| S58 | 0    | ("2005/0141626").URPN.   | USPAT           | OR | OFF | 2006/04/12 14:04 |
| S59 | 9    | eighth with pilot with tone  | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:11 |
| S60 | 14   | flash near2 ofdm   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:21 |
| S61 | 2    | S60 and (null or ((zero or "0") with power))   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:24 |
| S62 | 31   | (null or ((zero or "0") with power)) and (tone near2 hop\$4)   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:29 |
| S63 | 1746 | (null or ((zero or "0") with power)) and ((tone or frequency) near2 hop\$4)                              | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:38 |
| S64 | 222  | S63 and ofdm   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:29 |
| S65 | 21   | S64 and laroia   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:30 |
| S66 | 20   | S64 and laroia.in.   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:30 |
| S67 | 202  | S64 xor S66  | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:30 |
| S68 | 37   | S67 and (sector or multi\$sector)  | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:42 |
| S69 | 0    | ("2005/0163194").URPN.   | USPAT           | OR | OFF | 2006/04/12 14:36 |
| S70 | 2024 | (null or ((zero or "0" or blank\$3 or attenuat\$3) with power)) and ((tone or frequency) near2 hop\$4)   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:39 |
| S71 | 938  | S70 and ((interference or noise or quality) with (estimat\$3 or indicat\$3 or calculat\$3 or measur\$3)) | US-PGPUB; USPAT | OR | ON  | 2006/04/13 10:06 |
| S72 | 617  | S71 and (sector or multi\$sector or bts or cell)   | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:43 |
| S73 | 273  | S72 and pilot and symbols  | US-PGPUB; USPAT | OR | ON  | 2006/04/12 14:43 |

## EAST Search History

|     |    |  |                 |    |    |                  |
|-----|----|--|-----------------|----|----|------------------|
| S74 | 2  | (flash near2 ofdm) and (((interference or noise or quality) with (estimat\$3 or indicat\$3 or calculat\$3 or measur\$3)) same power)                             | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:07 |
| S75 | 78 | (((frequency or tone) near2 hop\$4) same ofdm) and (((interference or noise or quality) with (estimat\$3 or indicat\$3 or calculat\$3 or measur\$3)) same power) | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:27 |
| S76 | 9  | S75 and (third adj sector)   | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:10 |
| S77 | 20 | S75 and (three adj sector)   | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:10 |
| S78 | 16 | S75 and laroia.in.   | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:28 |
| S79 | 62 | S75 xor S78  | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:16 |
| S80 | 49 | S79 and ((attenuat\$4 or blank\$3 or null\$3 or reduc\$3 or eliminat\$3 or off) same (power or amplitude))   | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:18 |
| S81 | 44 | S79 and ((attenuat\$4 or blank\$3 or null\$3 or reduc\$3 or eliminat\$3 or off) with (power or amplitude or pilot or signal))                                    | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:20 |
| S82 | 48 | S79 and ((attenuat\$4 or blank\$3 or null\$3 or reduc\$3 or eliminat\$3 or off or zero or "0") with (power or amplitude or pilot or signal))                     | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:28 |
| S83 | 4  | S82 xor S81  | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:22 |
| S84 | 4  | S81 xor S82  | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:23 |
| S85 | 83 | (((frequency or tone) near2 hop\$4) same ofdm) and (((interference or noise or quality) with (estimat\$3 or indicat\$3 or calculat\$3 or measur\$3)) same power) | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:27 |
| S86 | 69 | S85 and ((attenuat\$4 or blank\$3 or null\$3 or reduc\$3 or eliminat\$3 or off or zero or "0") with (power or amplitude or pilot or signal))                     | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:41 |
| S87 | 21 | S86 xor S82  | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:29 |
| S88 | 5  | S87 xor S78  | US-PGPUB; USPAT | OR | ON | 2006/04/13 10:31 |

## EAST Search History

|     |     |   |                    |    |    |                  |
|-----|-----|---|--------------------|----|----|------------------|
| S89 | 11  | zero\$signal and pilot  | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:40 |
| S90 | 299 | (pilot with (pattern or sequence))<br>and ((frequency or tone) with<br>hop\$4)  | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:40 |
| S91 | 271 | S90 and ((attenuat\$4 or blank\$3 or<br>null\$3 or reduc\$3 or eliminat\$3 or<br>off or zero or "0") with (power or<br>amplitude or pilot or signal)) | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:51 |
| S92 | 244 | S90 and ((attenuat\$4 or blank\$3 or<br>null\$3 or eliminat\$3 or off or zero or<br>"0") with (power or amplitude or<br>pilot or signal))             | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:52 |
| S93 | 232 | S90 and ((attenuat\$4 or blank\$3 or<br>null\$3 or eliminat\$3 or zero or "0")<br>with (power or amplitude or pilot or<br>signal))                    | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:53 |
| S94 | 195 | S93 and (@ad<"20030224" or<br>@rlad<"20030224")   | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:54 |
| S95 | 179 | S94 and (sector or multi\$sector or<br>cell or multi\$cell or ofdm\$ or fdm\$)  | US-PGPUB;<br>USPAT | OR | ON | 2006/04/13 10:55 |